



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300



Photometric Test Report

Relevant Standards
IES LM-79-2008, ANSI C82.77-2002

Prepared For
Auroralight Inc

2742 Loker Ave W
#100
Carlsbad, CA 92010-6619
United States

Catalog Number
LSW1-30 (3000K)

Order Number
13551695
Test Number
13551695.08

Test Date

2020-10-30

Prepared By

Jesse Litchfield, Technician

Approved By

Alexa Lambert, Project Handler

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Rectangular brass faceplate with square opening
Lamp: One (1) XP-L 3000K Cree LED
Mounting: Step/Wall
Ballast/Driver: Integrated

Luminaire



Luminaire Characteristics

Luminous Length: 0.10 in.
Luminous Width: 1.500 in.
Luminous Height: 1.50 in.

Summary of Results

Roadway Classification: Type I, Very Short
Cutoff Classification: Noncutoff
BUG Rating: B0 U1 G0

Test Conditions

Test Temperature: 25.1 °C
Voltage: 12.25 VAC
Current: 0.3735 A
Power: 2.875 W
Power Factor: 0.628
Frequency: 60 Hz
Current THD: 92.7 %

Tested in 30 planes left side, 30 planes right side, left and right averaged
Vertical test increments are 2.5 degrees
Test distance exceeds five times the greatest luminous opening of luminaire

Laboratory results may not be representative of field performance
Ballast factors have not been applied



Distribution - Goniophotometer

Distribution Test Conditions

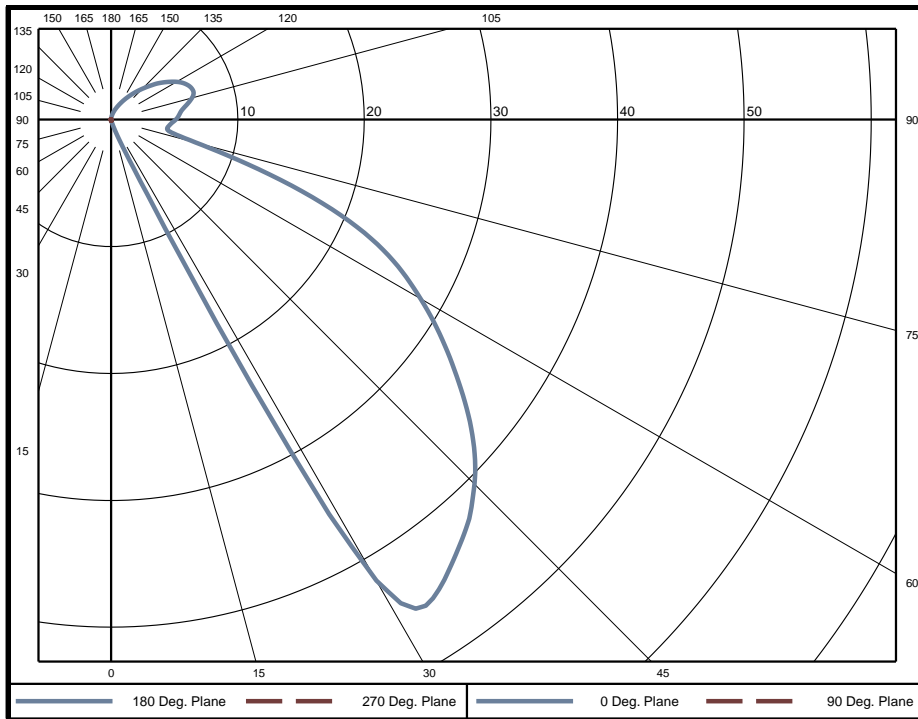
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.1 °C	12.25 VAC	0.3735 A	2.875 W	0.628	60 Hz	92.7 %

Summary of Results

Spacing Criteria
 0-180: 14.03
 90-270: 1.52

Total Lumen Output: 30.92 Lumens
Luminaire Efficacy: 10.8 lm/w
Maximum Candela: 46 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0.001	0.0%	60-65	2.534	8.2%	120-125	0.481	1.6%
5-10	0.002	0.0%	65-70	1.980	6.4%	125-130	0.397	1.3%
10-15	0.005	0.0%	70-75	1.161	3.8%	130-135	0.312	1.0%
15-20	0.015	0.0%	75-80	0.677	2.2%	135-140	0.234	0.8%
20-25	0.072	0.2%	80-85	0.599	1.9%	140-145	0.170	0.5%
25-30	0.605	2.0%	85-90	0.607	2.0%	145-150	0.124	0.4%
30-35	2.249	7.3%	90-95	0.615	2.0%	150-155	0.084	0.3%
35-40	2.817	9.1%	95-100	0.616	2.0%	155-160	0.053	0.2%
40-45	3.013	9.7%	100-105	0.644	2.1%	160-165	0.028	0.1%
45-50	3.097	10.0%	105-110	0.655	2.1%	165-170	0.012	0.0%
50-55	3.031	9.8%	110-115	0.621	2.0%	170-175	0.002	0.0%
55-60	2.844	9.2%	115-120	0.559	1.8%	175-180	0.000	0.0%

Zone	Lumens	% of Luminaire
0-40	6	18.6%
0-60	18	57.4%
0-90	25	81.9%
90-180	6	18.1%



Candela Tabulation
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	Horizontal Angle (Degrees)															
	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
0	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
5	0.02	0.03	0.04	0.04	0.04	0.03	0.02	0.01	0.00	0.01	0.02	0.03	0.04	0.04	0.04	0.03
10	0.06	0.06	0.06	0.05	0.04	0.03	0.02	0.01	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.06
15	0.14	0.11	0.09	0.07	0.04	0.02	0.01	0.00	0.00	0.00	0.01	0.02	0.04	0.07	0.09	0.11
20	0.83	0.53	0.14	0.08	0.03	0.02	0.01	0.00	0.00	0.00	0.01	0.02	0.03	0.08	0.14	0.53
25	4.17	2.27	0.50	0.11	0.03	0.02	0.01	0.00	0.00	0.00	0.01	0.02	0.03	0.11	0.50	2.27
30	41.93	20.39	1.34	0.15	0.03	0.02	0.01	0.00	0.00	0.00	0.01	0.02	0.03	0.15	1.34	20.39
35	45.17	42.08	2.88	0.21	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.21	2.88	42.08
40	43.15	40.68	4.04	0.30	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.30	4.04	40.68
45	40.60	38.18	4.54	0.43	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.43	4.54	38.18
50	37.01	34.98	4.69	0.61	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.61	4.69	34.98
55	32.68	30.98	4.52	0.82	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.82	4.52	30.98
60	28.25	26.43	4.14	0.96	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.96	4.14	26.43
65	23.22	21.10	3.61	1.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.01	3.61	21.10
70	15.18	12.90	2.96	1.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.00	2.96	12.90
75	6.89	5.52	2.42	0.95	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.95	2.42	5.52
80	4.52	3.63	2.17	0.89	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.89	2.17	3.63
85	4.66	3.57	2.03	0.83	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.83	2.03	3.57
90	5.10	3.72	1.91	0.78	0.01	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.78	1.91	3.72
95	5.45	3.74	1.74	0.72	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.72	1.74	3.74
100	5.92	3.90	1.70	0.67	0.01	0.00	0.01	0.02	0.02	0.02	0.01	0.00	0.01	0.67	1.70	3.90
105	6.62	4.26	1.69	0.61	0.01	0.00	0.01	0.03	0.03	0.03	0.01	0.00	0.01	0.61	1.69	4.26
110	6.87	4.34	1.61	0.55	0.01	0.00	0.02	0.03	0.04	0.03	0.02	0.00	0.01	0.55	1.61	4.34
115	6.58	4.17	1.51	0.50	0.01	0.00	0.02	0.04	0.04	0.04	0.02	0.00	0.01	0.50	1.51	4.17
120	5.98	3.84	1.41	0.46	0.01	0.00	0.02	0.04	0.05	0.04	0.02	0.00	0.01	0.46	1.41	3.84
125	5.15	3.42	1.31	0.42	0.01	0.00	0.02	0.04	0.05	0.04	0.02	0.00	0.01	0.42	1.31	3.42
130	4.26	2.91	1.21	0.40	0.01	0.00	0.02	0.04	0.06	0.04	0.02	0.00	0.01	0.40	1.21	2.91
135	3.42	2.36	1.06	0.37	0.01	0.00	0.02	0.04	0.06	0.04	0.02	0.00	0.01	0.37	1.06	2.36
140	2.68	1.83	0.90	0.35	0.01	0.00	0.02	0.03	0.05	0.03	0.02	0.00	0.01	0.35	0.90	1.83
145	2.04	1.49	0.79	0.31	0.01	0.00	0.02	0.03	0.04	0.03	0.02	0.00	0.01	0.31	0.79	1.49
150	1.51	1.22	0.71	0.26	0.01	0.00	0.01	0.02	0.04	0.02	0.01	0.00	0.01	0.26	0.71	1.22
155	1.10	0.92	0.57	0.23	0.01	0.00	0.01	0.02	0.03	0.02	0.01	0.00	0.01	0.23	0.57	0.92
160	0.78	0.67	0.38	0.20	0.01	0.00	0.01	0.01	0.03	0.01	0.01	0.00	0.01	0.20	0.38	0.67
165	0.51	0.35	0.23	0.16	0.02	0.00	0.01	0.01	0.02	0.01	0.01	0.00	0.02	0.16	0.23	0.35
170	0.30	0.18	0.11	0.08	0.01	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.08	0.11	0.18
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Luminance (cd/m²)
Horizontal Angle (Degrees)

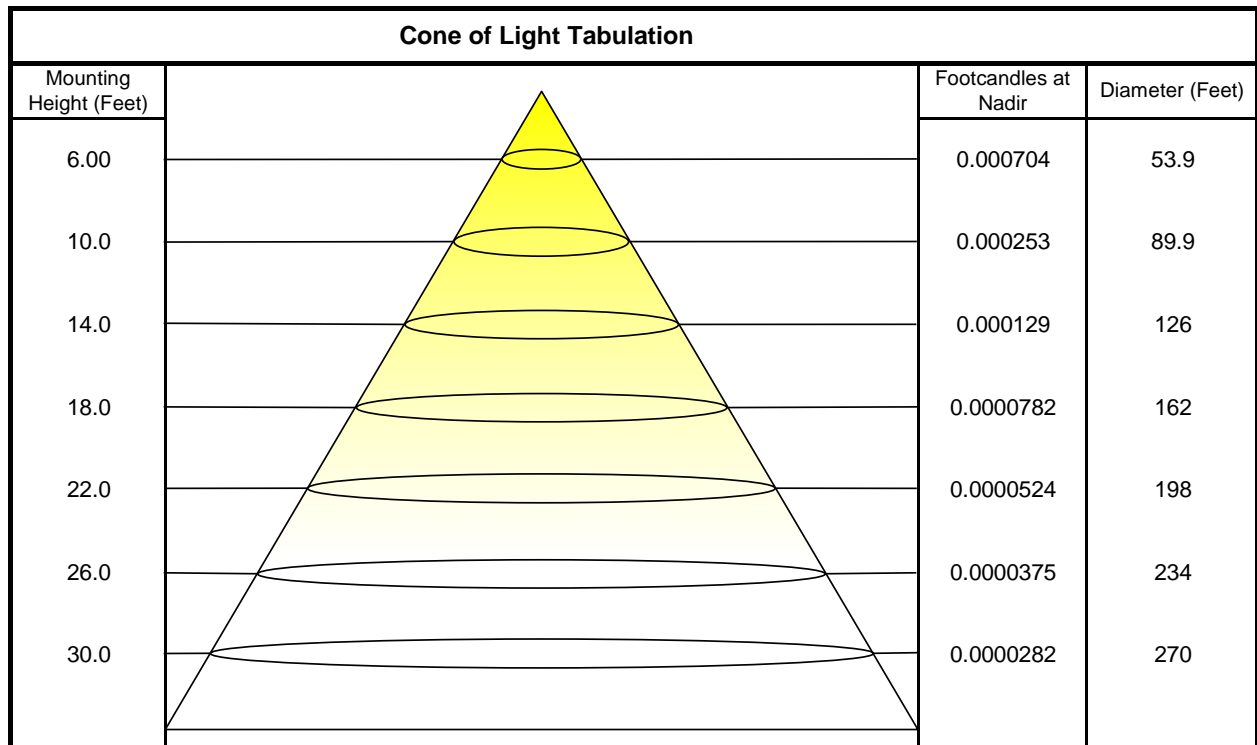
Vertical Angle (Degrees)	Horizontal Angle (Degrees)		
	0	45	90
0	262	262	262
45	37090	5384	158
55	26260	4744	110
65	17110	3497	101
75	4830	2239	96
85	3200	1847	111



Utilization of Lumens - Zonal Cavity Method

Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																	
0	35	35	35	35	34	34	34	34	31	31	31	29	29	29	26	26	26	25
1	32	30	28	27	30	29	27	26	26	25	24	24	23	23	22	22	21	20
2	28	25	23	21	27	24	22	20	22	21	19	20	19	18	19	18	17	15
3	25	22	19	17	24	21	18	16	19	17	15	17	16	14	16	14	13	12
4	23	19	16	13	22	18	15	13	16	14	12	15	13	11	14	12	11	10
5	21	16	13	11	19	15	13	10	14	12	10	13	11	9	12	10	9	8
6	19	14	11	9	18	13	11	9	12	10	8	11	9	7	10	8	7	6
7	17	12	9	7	16	12	9	7	11	8	7	10	8	6	9	7	6	5
8	16	11	8	6	15	10	8	6	10	7	6	9	7	5	8	6	5	4
9	14	10	7	5	14	9	7	5	9	6	5	8	6	4	7	5	4	3
10	13	9	6	4	13	8	6	4	8	5	4	7	5	4	6	5	3	3

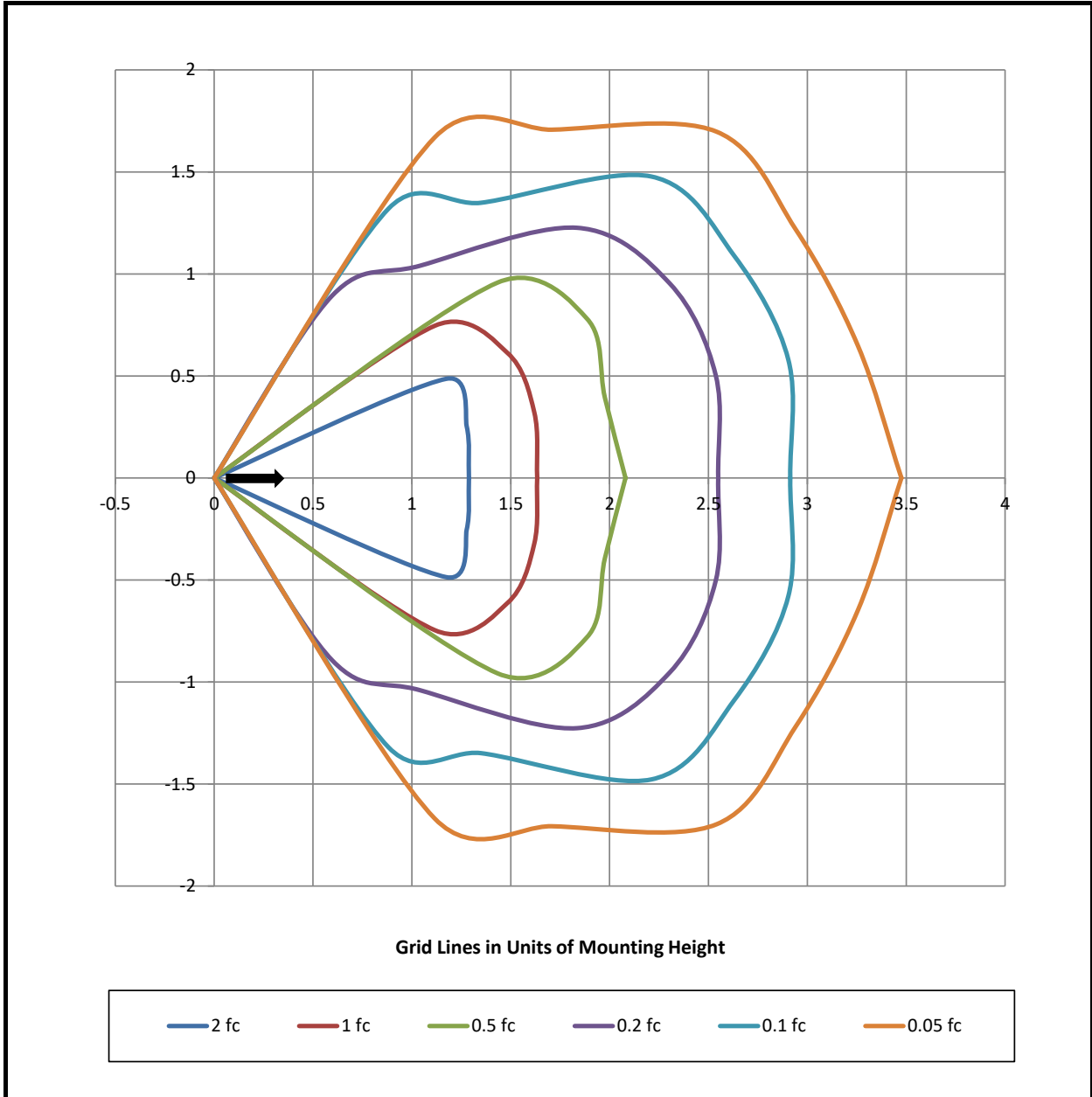
Beam and Field Information	
CIE Type:	Semi-Direct
Center Beam Intensity:	0.03 Candela
Central Cone Intensity:	0 Candela
Beam Flux:	30.9 Lumens
Beam Angle (0-180):	172.2 Degrees
Beam Angle (90-270):	139.8 Degrees
Field Angle (0-180):	347.5 Degrees
Field Angle (90-270):	N/A Degrees





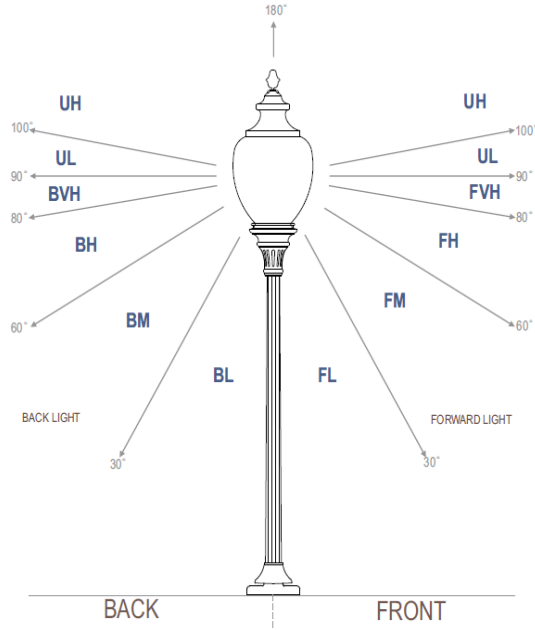
ISOFootcandle Plot

Mounting Height - 2 Feet





IES "BUG" Rating
 (Back Light, Uplight, Glare)
 Per IES TM-15-11



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	0.7	2.3%
FM	(30-60)	18.5	56.4%
FH	(60-80)	6.7	20.5%
FVH	(80-90)	1.2	3.7%
BL	(0-30)	0.0	0.0%
BM	(30-60)	0.0	0.0%
BH	(60-80)	0.0	0.0%
BVH	(80-90)	0.0	0.0%
UL	(90-100)	1.2	3.8%
UH	(100-180)	4.4	13.3%
Total		32.7	100.0%
BUG Rating	B0 U1 G0		